

Appl. No.: 09/486,677
Reply to March 6, 2007 Office Action
Group Art Unit: 1621

Remarks

The following remarks are responsive to the March 6, 2007 Office Action.
Reconsideration is respectfully requested.

Status of the Claims

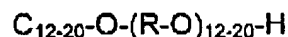
Claims 10, 14-26 and 30 are pending. Claims 1-9, 11-13 and 27-29 were cancelled previously.

Rejection under 35 U.S.C. §§ 102(b)/103(a)

Claims 10, 14-26 and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, unpatentable over U.S. Patent No. 3,382,285 (Egan).

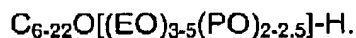
Egan relates to a liquid, non-ionic polyoxyalkylene surface active material. The Examiner alleges that Egan teaches a material having the claimed formula (column 2, lines 1-26). Contrary to the Examiner's allegation, the polyalkylene of Egan does not have the same formula as in Claims 10, 14-26 and 30 for reasons which follow.

The polyalkylene of Egan corresponds to the following formula:



where RO is a heteric polyoxyalkylene chain of oxyethylene (EO) and oxypropylene (PO) units, and the ratio of EO to PO units is 2-4.5:1.

The polymers of the invention comprising random fatty alcohol alkoxylates correspond to the following formula:



As illustrated above, the number of EO and PO units in Egan ranges between 12 and 20, whereas the average number of EO and PO units in Applicants' formula ranges between about 5 and about 7.5.

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For a reference to anticipate, every element of the claimed invention must be identically shown in the reference. Egan fails to disclose an average number of 3-5 ethoxylate units and an average number of 2-2.5 propoxylate units. Egan also fails to disclose a cold cloud point below 0°C as in Claims 10, 14-26 and 30. Therefore, since every element claimed is not disclosed in Egan, the rejection should be withdrawn. Reconsideration and withdrawal of the rejection is respectfully requested.

The Examiner further alleges that Egan differs from the claims in the molar ratios of PO and EO and the concentrations of the reactants, and concludes that it would have been obvious to vary the molar ratios of propylene oxide and ethylene oxide and the concentration of the reactants depending upon the desired final product (col. 3, line 2 to col. 4, line 11).

Egan discloses that the total amount of alkylene oxides employed is from 12 to about 20 moles of ethylene oxide and propylene oxide per mole of alcohol. Contrary to the Examiner's allegation, Egan teaches that less or more than these amounts will produce a product which does not have the desired surface activity, and less than these amounts will cause the product to be solid rather than liquid (col. 3, lines 55-63). Although different amounts and ratios of EO and PO were used in Example XIII of Egan (col. 9) as reported in Table III, it was determined that only the product with a 3:1 ratio of EO to PO units was suitable. Therefore, Egan teaches away from using less (or more) than 12-20 units of EO and PO.

In addition, Applicants' fatty alcohol alkoxylates provide a new and unexpected result as illustrated by the Examples on pages 6-7 of the specification. In Examples 1 and 2, the products obtained have cold cloud points of -4°C and -14°C, respectively.

There is no disclosure, teaching, suggestion or motivation provided by Egan to (1) select the average number of EO units present in each random fatty alcohol alkoxylate to have a value of from about 3 to about 5, and (2) select the average number of PO units present in each random fatty alcohol alkoxylate to have a value of

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from about 2 to about 2.5. In addition, there is no disclosure whatsoever in Egan concerning the desirability of obtaining a cold cloud point below 0°C.

There is no disclosure, teaching, suggestion or motivation provided by Egan to vary the molar ratios of PO and EO and the concentration of the reactants to achieve a cold cloud point below 0°C. Therefore, in view of the lack of express or implied teaching, suggestion or motivation from Egan, it would not have been obvious to arrive at the invention of Claims 10, 14-26 and 30 with any reasonable expectation of success absent the benefit of Applicants disclosure, and the rejection should be withdrawn. Reconsideration and withdrawal of the rejection are respectfully requested.

Fees

No fees are believed due, but the Commissioner is authorized to charge any fees due (or credit any balance owing) to Deposit Account No. 50-1177.

Conclusion


It is respectfully submitted that Claims 10, 14-26 and 30 are in condition for allowance. A Notice of Allowance is respectfully requested. If anything further is needed to advance the allowance of this application, the Examiner is respectfully requested to contact Applicants' attorney at the telephone number indicated below.

Respectfully submitted,

April 3, 2007

Date

Cognis Corporation, Patent Dept.
300 Brookside Avenue
Ambler, PA 19002


Jane E. Alexander
Reg. No. 36,014
Attorney for Applicants
Telephone: (215) 628-1474
Facsimile: (215) 628-1345